

In the Claims:

Please cancel claim 3.

1. (Original) A method for testing a magnetoresistive sensor for polarity reversal, comprising:
 - writing a test pattern on a magnetic disk;
 - using a magnetoresistive sensor on a slider to read a first readback signal from the test pattern;
 - determining the polarity of the first readback signal;
 - creating a protrusion on the magnetic disk;
 - operating the slider over the protrusion for a preset period of time;
 - using the magnetoresistive sensor to read a second readback signal from the test pattern;
 - determining the polarity of the second readback signal;and,
 - comparing the polarity of the first readback signal to the polarity of the second readback signal to determine if a change in polarity has occurred.
2. (Original) A method as in claim 1 wherein the protrusion is created by loading the slider on the magnetic disk while the magnetic disk is rotating.
3. (Cancelled)
4. (Original) A method as in claim 1 wherein the protrusion is created by gouging the magnetic disk.
5. (Original) A method as in claim 1 wherein the protrusion is created by locally heating the magnetic disk with a laser.

6. (Original) A method as in claim 1 wherein the test pattern on the disk includes a group of written transitions followed by a space with no transitions.

7. (Original) A method for testing a magnetoresistive sensor on a slider for polarity reversal, comprising:

- creating a protrusion on the magnetic disk;
- writing an asymmetrical pattern on a magnetic disk;
- using the magnetoresistive sensor to read a first readback signal from the test pattern;
- determining the polarity of the first readback signal;
- providing a perturbation to the magnetoresistive sensor with the protrusion;
- using the magnetoresistive sensor to read a second readback signal from the test pattern;
- determining the polarity of the second readback signal;

and,

- comparing the polarity of the first readback signal to the polarity of the second readback signal to determine if a change in polarity has occurred.

8. (Original) A method as in claim 7 wherein the protrusion is created by loading the slider onto the magnetic disk while the magnetic disk is rotating.

9. (Original) A method as in claim 7 wherein the protrusion is created by sputtering material onto the magnetic disk.

10. (Original) A method as in claim 7 wherein the protrusion is created by gouging the magnetic disk.

11. (Original) A method as in claim 7 wherein the test pattern includes a group of written transitions followed by a space with no transitions.

12. (Original) A method as in claim 7 wherein the protrusion is created by locally heating the magnetic disk with a laser.